

REMARKS**Status of the Claims**

Claims 22-24 remain in this application.

The 35 U.S.C. §103 rejection

Claims 22-24 remain rejected under 35 U.S.C. §103(a), as unpatentable over GenBank Accession Number **W22987** (October 8, 1997), in view of **Lerner** (Nature 299:592-596, 1982). This rejection is respectfully traversed.

Lerner teaches that antibodies that specifically bind to a particular epitope may cross-react with different antigens that have the particular epitope in common. **W22987** discloses the sequence of a serine protease expressed in the human colon carcinoma cell line **COLO 201**, which is identical to amino acids 615-855 of **TADG-15**. The Examiner argues that it would be obvious to use the teachings of **Lerner** to generate an antibody against all or part of **W22987** to obtain an antibody against **TADG-15**, and to incorporate such an antibody into the kit of the instant invention. The Applicant respectfully disagrees.

It is well known in the art that when creating an antibody that specifically binds to a particular protein, it is desirable to obtain an antibody that cross-reacts with other proteins as little as possible, so that the results of applications using the antibody will detect the presence of the desired protein as specifically as possible. Therefore, one skilled in the art would wish to generate antibodies with specificity to epitopes of the desired protein that are not shared in common with other proteins.

The legend to Figure 4 of the instant specification on Page 10, lines 16-20 clearly indicates that amino acids 615 to 855 were considered to represent a distinct domain from the rest of the TADG-15 protein. Therefore, one skilled in the art, when attempting to create an antibody specific to the TADG-15 protein, would exclude this distinct domain from those sequences used to generate antibodies, in order to avoid generating antibodies with cross-reactive binding activity to other proteins containing this domain.

As amino acids 1-614 of the TADG-15 protein are not disclosed by W22987, it would not be obvious to one skilled in the art to arrive at the claimed invention from the combined teachings of W22987 in view of Lerner. The combined references rather teach away from the combined invention, because the sequence disclosed